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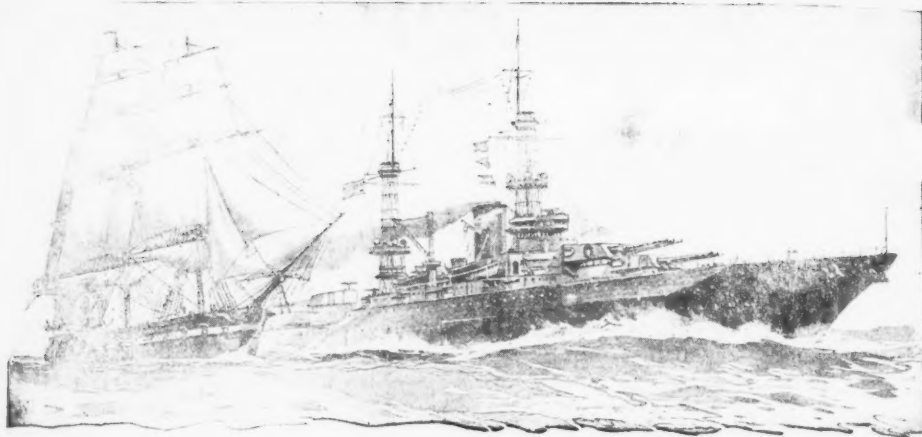
1919

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THE CORNELL COUNTRYMAN



NOVEMBER



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NOVEMBER 1-22

The Co-op. has paid dividends to students regularly for the past fifteen years. From November first to the twenty-second we will pay on registered purchases of the college year 1918-19. Those in Ithaca must claim their dividend at the store.

Former Students

NOT IN ITHACA

Send us your address. On November twenty-fifth we begin the job of making out checks and money orders. If we have your address we send a money order and save for you the charges for collection made by the bank.

Cornell
Co-operative Society
ITHACA, N. Y.



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November

1919

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Fall



AD I skill, a song I'd sing
Of the Fall as of the Spring,
Of its wailing winds and rain.



OW that leaves come drifting down
And the trees stand bare and brown
Somberly in field and lane,—



ON'T you think some poet should deign
To poetically exclaim,
That they're coming back again?

A. P. N.

The Cornell Countryman

A Journal of Country Life—Plant, Animal, Human

Vol. XVII

ITHACA, N. Y., NOVEMBER, 1919

No. 2

Crop Insurance By Drainage

Provision Against Wet Years on Low Lands as a Business Proposition

BY HENRY E. COX

Secretary-Treasurer, New York State Bean Growers' Association

MANY farms have fields that produce good crops during normally dry seasons, but which when a wet season occurs are cropped at a loss. Drainage of such fields acts as crop insurance, not only for current years, but for generations to come. Considered in the light of the many years covered, such insurance is the cheapest and surest obtainable, insofar as natural

hazards incident to variations of rainfall are concerned. The present world need of food, and the upward trend of food prices has made this type of crop insurance a good business proposition for the American farmer.

When a man has gone to the expense of erecting a new building, or has just stored a grain crop, he hastens to insure his new property. Why? He has had no fire losses as yet, and may never have any. But the insurance makes the investment safe. Thus it follows that there are fields which have never yet

failed to produce returns on account of too much water but which appear liable to such disaster, and which, theoretically, might come under the category of fields to be insured by drainage. No

doubt, this practice will come in time. Right now, however, the practice will apply particularly to fields which have been known to "miss out" within the experience of the owner.

There is another aspect of the proposition which will grow as the general idea of insurance by drainage looms larger in the public eye. This is the ethical aspect, the proprietary point of view that takes into account not only present prospects, but an obligation, a stewardship, to the land itself and to the generations that will till it in the future. The heads of farm families who have been long on the land and who expect to pass on their particular portion of it to sons and descendants understand this aspect. It will come to be more generally recognized as the rela-

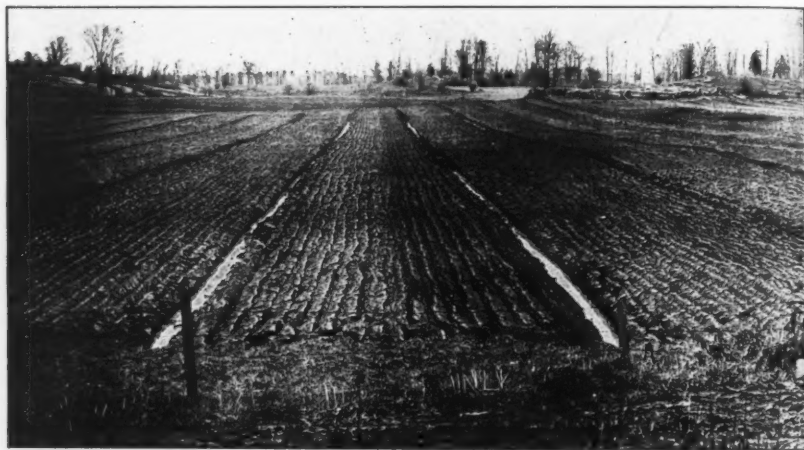
M^{R.} COX has long been a sturdy advocate of farm drainage, and has led much good work in this direction about New York State. In this article, he attacks the matter from a new angle, and opens up a field for great expansion. It is an interesting idea, this idea of insurance by the power ditcher, and the author's high standing as a practical drainage man adds weight to it.

tion of all humanity to the earth comes to be better understood. Already, a sentiment against the soil-robber has become well-defined, the country over.

Drainage is not among those forms of insurance that can be acquired by signing on a dotted line. It is one of the most permanent and lasting improvements that can be entered into on any

Not all of the former methods of getting tile properly laid are now available. For example, when labor was cheap it was often the practice to contract for experienced men to lay the drains at so much a rod. This method is now out of question, but accomplished excellent work while in vogue.

Another time-tried system, still pos-



Everybody knows swampiness demands drainage, but how about lands subject to wet-season swampiness?

farm, but it is important that the work be entered into with understanding. The novice in drainage is inclined to say, "Why all this talk about ditching? All there is to do is to dig a ditch and lay tile in it." This conception has been too often followed out and as a consequence a good deal of money has been buried. Many fields that are full of tiles never discharge water, simply because somebody just dug a ditch and laid tile in it. Drainage should be in the charge of drainage experts, if success is to be assured. The state realizes this and the agricultural colleges thruout the country are always willing to respond to the call of the landowner and give expert assistance. A civil engineer is sent to lay out the system, establish grades, state the sizes of the tiles required for different grades or different soil conditions, and to supervise many such difficult details of the work.

sible but not always practical, is that of the farmer having his own working forces plow a deep dead-furrow and then shovel out the loose dirt. A narrow plow or some such instrument is then employed to again loosen up the sub-soil, so that finally there is but one depth of ditching for the spade to remove after the team-grading is done. The objection to this system is that on extremely hard bottoms it is difficult to get the proper depth. Twenty-four inches, the author believes, is the least that should be left above the top of the tiles. If the tractor is used in this connection other difficulties arise. Two men are necessary, one on the machine and the other following with pick and shovel to remove any large stones that may interfere with the cutter. However, a great deal of ditch can be opened in a day by a ditcher drawn by horses or by a tractor.

(Continued on page 92)

The Pro-Potash "Revolution" Called to Question

To the left below is what W. J. Spillman thinks of the Ross article published in the October *Farm Journal*; to the right what E. L. Worthen of the department of soils writes farm bureau agents about it. Doctor Spillman was formerly head of federal farm management investigations. Next month, Professor Cavanaugh will comment more fully on the article.

In this article Mr. Ross sets forth discoveries that will revolutionize the use of commercial fertilizers. They spell the doom of commercial nitrogen in rotation farming—triple or quadruple the demand for potash, and stand the whole fertilizer situation on its head. Millions and millions of dollars have been wasted by farmers in following the principles of fertilization laid down by Liebig in 1842. The Liebig theory proposed to supply the elements in which the soil is deficient. Chemists adhered to this theory for half a century, and fertilizer practise is still largely based on it. The Ross plan makes the needs of the plant the basic formula, the object of field experiments being to find out how much of these needs the soil itself may be depended on to supply. Mr. Ross further points out that the excessive use of phosphorus is wasteful, and that soil fertility can be maintained, and worn-out soil built up, without the use of stable manure. He shows that nitrogen is the thief which has been robbing farmers unawares for many decades.

We regard this article of Ross's as the most important thing we have ever seen on the subject of commercial fertilizers, and *The Farm Journal* may well be proud of having printed it first.

We will no doubt be jumped on hard for this. It throws a firebrand into the camp of the chemist, and plays hob with the phosphate people as well as with the nitrate people. It also plays into the hands of the potash people, unless we take steps to develop our own almost exhaustless potash deposits. It makes it more important than ever that we get from under the German potash monopoly.

W. J. SPILLMAN

Your attention has undoubtedly been called to the somewhat sensational article in the October issue of *The Farm Journal* entitled "Old Fertilizer Theories All Scrapped." Unless you are very familiar with the Pennsylvania, Ohio, and Rothamsted results, you may be led astray by this article.

Ross's conclusions from the Pennsylvania results relative to the great importance of potash are unwarranted. His statements belittling the importance of soil improvement could hardly be credited to one interested in the future of American agriculture. He has grounds for some of his criticisms relative to the methods used in arriving at the profit resulting from the use of fertilizer. He is also justified in his statement that experimental results show little profit from the use of commercial nitrogen on field crops but this fact has been emphasized by our better authorities, and recently has been acknowledged by the organization representing the fertilizer manufacturers.

Remember, that our present plan for the economic utilization and improvement of New York soils thru the intelligent use of lime, phosphorus, and manure, along with a rotation in which legumes enter frequently has been based on these same results secured by the Rothamsted, Pennsylvania, and Ohio stations. The interpretations of the results that have led to this system of soil treatment have been made by such men as Hall, Russell, Thorne, Hopkins and Hunt.

I am sure that you will agree that we should use every effort to prevent New York farmers being led astray by this type of articles.

E. L. WORTHEN

The College and the Country Paper

Journalistic Extension to Help Editors and Readers Alike

BY BRISTOW ADAMS

Editor of Publications of the College of Agriculture

FOR a great many years in the history of agricultural development in the United States, the chief dependence, and almost the only dependence upon the printed word, was placed in government or state bulletins which were distributed free to the farmer. The hope was that he would read them and profit from the reading. Only in comparatively recent years have the various agricultural agencies, state and national, come to a realization that the publications already in the field and being read by farmers furnish the best means for bringing agricultural news to their attention.

This recognition came about from two causes: first, that the bulletins issued by governmental institutions are likely to be dry and uninteresting; and second, that their intelligent distribution is almost an impossibility. Yet, the farmer reads regularly his agricultural and his local paper, and for a long time these papers were almost wholly without agricultural news. Nowadays it is a backward college, indeed, which does not make use of the columns of the local papers to reach the agricultural public.

However, much depends upon the manner in which these papers are used. For a long time they were not so much used as abused. It was expected that they would print bald "publicity" about the institution and the good work that it was able to do for the farmer. It is fair to Cornell to say that it never looked for such publicity. True, the College of Agriculture did not do a great deal through the established periodicals until recent years, but when it started it started right. The prime objects which it kept in mind at all times were that the matter sent out should benefit the reader, and that it should contain helpful and timely information; and further, that it should contain no publicity, either for the institution or

for any individuals connected with it. At the present time the rural and agricultural papers of New York State are using this news matter to an almost unbelievable extent, and in the first nine months of the current year they have given a circulation of more than sixty-three million to the items issued by the College, or an average of more than seven million a month. This circulation is not an estimate, but is based upon printings which persons at the College have actually seen.

Recently a further development has grown out of this news service, and by a careful study of the field the College has come to the conclusion that the newspapers themselves should receive the benefit of an extension service just as the farmers and the home makers receive a similar benefit in their respective fields. In other words, the newspaper is no less an agency for the development of rural community than are the rural school, the grange, the farm bureau, the country church, and other similar institutions. Without the newspaper, records of achievement, notices of meetings, and other similar matter could be made known only at the expense of considerable time and trouble, and then much less adequately than through the columns of the local press.

For this reason the College of Agriculture has developed a definite extension service to country weeklies; it now publishes what it calls the "Service Sheet," which gives news concerning the country weekly field, and helpful information for the conducting of rural newspaper enterprises. Publishers of rural papers are writing to the College intimate and personal letters asking for help in the solution of local problems, and these problems cover many subjects, from questions of editorial policy to matters of typographical dress. The work is carried on under a definite project and

The Service Sheet

Published Monthly by the New York State College of Agriculture at Cornell University in the interest of the country newspapers of the state

The Service Man, Editor

NOTICE OF ENTRY
Acceptance for mailing at special rate provided for in Sec. 1109 Act of October 3, 1917, authorized September 8, 1919

Vol. I Ithaca, N. Y., Oct., 1919 No. 3

What do you think of the fellow that is always asking for a "free" copy? The Service Man is in that class this month. Don't be alarmed, he's not asking for a free subscription but merely for a single copy of your paper if you haven't already sent him one. He is starting a file which he hopes in time will contain a copy of every weekly newspaper published in New York. He is making a study of these papers and hopes to have something to offer which may be of a little help to the publishers.

Among those who accepted the invitation of the Service Man to visit him at the state fair at Syracuse were C. K. Williams of the Phoenix Register; R. E. Fenton of the Cayuga County News, who was accompanied by Mr. Walker, his foreman; and Thomas E. Mowry, who has five papers, including the Marcellus Observer and the Camillus Enterprise;

Has your editor doubled the subscription price and advertising rate of your newspaper? If not, he needs to.

T. P. Hause of the Interlaken Review, C. H. Skelton of the Canastota Courant, C. H. Betts of the Lyons Republican, W. C. Wheeler of the Tully Times, and F. M. Cornell of the Fulton Patriot who had time just for a how-do-you-do as he went past the exhibit.

Some notable special editions in honor of welcome-home celebrations have been issued by the weekly papers of the state. Among these the Service Man has seen those of the Carthage Republican, the Union News-Dispatch, the Seneca County News, and the Owego Times.

Speaking of the Owego Times, while it has always been one of the new and prosperous newspapers of the state, until lately it has not made much use of display heads on the front page. The Service Man has been interested to see how much the appearance of the front page recently has been improved by the use of three-deck heads. The top deck is usually an 18-point condensed Cheltenham lap line in caps, the second is a single line of 12-point

caps, and the third a 5-line hanging indent of 12-point caps and lower case. For the inside pages, use is made of the 18-point lap line and the hanging indent only.

Another paper which, in the opinion of the Service Man, has improved the typography of the front page is the Cortland Democrat. Frequent use is now being made on the front page of boxes for freak and feature stories and also of a two-column 24-point head.

The Salem Press man, Louis H. Barton, took the story sent out from the college concerning the exhibit at the state fair in the interest of the country newspapers and developed it into a column local story for his front page. The story was in the form of an interview with a Salem

The college believes the local newspapers of the state are making a real contribution to the life of the communities in which they are published.

druggist who brought back word of the exhibit and how it set him to thinking about the local paper and its value as an advertising medium. It was a good ad for the druggist and even a better one for The Press.

Whenever an editor has a ready-print or similar proposition put up to him he should ask himself whether in the long run he will gain or lose. A free ready-print carrying ads may save him some cost in white paper. But if it banishes from his columns—or from his fellow publishers' columns—advertising which he could otherwise get, the saving is a dubious one.

Willard C. Wheeler of the Tully Times in a recent editorial invites the farmers among his readers to use his paper as an open forum for the discussion of problems of peculiar interest to agriculture.

It's Worth Having

Every weekly newspaper publisher of New York state ought to subscribe for the American Press. The Press is a champion of the country papers. The full page ads which the American Press Association has been publishing in the New York Times will do more to make the big advertisers think seriously about the country field than anything which has been done in the history of the country weekly in America. If you haven't already done so, get in touch with the American Press, 225 West 39th Street, New York City.

SPINELESS EDITOR COMMON MISNOMER

(Continued from page 1)

one political party of the community will feel it is being unfairly treated if the editor is a violent partisan.

The paper which has been edited for a long period of years by one editor, who has been tactful in handling controversial questions, has been of more service to its community than has the paper of an editor who has gone into a village, has raised a great disturbance for a few months, or else has got everyone in the community by the ears and then has lighted out to seek green fields and pastures new.

There is also a personal side to it. The editor is a human being. He wants friends, and every time he attacks an individual in that community he is attacking a personal acquaintance, perhaps a friend. This is by no means saying that the country editor should not have opinions and be willing to express them, but the greater service which he renders is by offering through his newspaper a medium for the exchange of ideas. The editor who refuses to open his columns to temperately written letters, not too long for the space he has for such matter, merely because he does not agree with the opinion expressed by the writer cannot be criticised too severely.

After all, the local newspaper is not so much a business as it is a

During the past four years 125 country newspapers went out of business in New York. What's a town without a newspaper?

community enterprise, and the country editor will be successful largely in proportion to the extent to which he is able to develop a realization of this fact among his constituents.

The Radii Suspends

The Canajoharie Radii suspended publication in July after a continuous existence of almost a century. It was established in 1836. Warren Scott, the publisher, gives the following reasons for suspension: Increased cost of production, higher wages, greater expense of materials and supplies; slow pay on the part of subscribers, more profit in job printing than in publishing a country weekly; in short, too much work and expense on the weekly for the monetary return.

Was Soldier; Now Editor

The Cobleskill Times, formerly owned and published by Joseph R. Brown, has been purchased by Charles L. Ryder who returned from service in France this past summer. Mr. Ryder when he entered military service was editor and publisher of the Sharon Springs Record.

is thoroly approved at the College and in Washington. According to a statement made at a recent meeting of agricultural college editors, the State Agricultural College of Oregon is the only other institution which has included in

its state and federal projects a similar type of work. This does not mean, however, that other institutions are not giving help to the country weeklies, but it is likely that the New York State College

(Continued on page 94)

Selling Agriculture to Fertilizer Salesmen

An Intimate Account of Give and Take Between the College and Big Business

BY E. G. McCLOSKEY

Eastern Editor of the Soil Improvement Committee of the National Fertilizer Association

ONE standing in the lobby of the "Ithaca" on the morning of June ninth last might well have wondered at the host which suddenly swarmed into it. It seemed almost like registration day except that assuredly the one hundred or so men who hopped off the morning sleepers were not "studes" or "Frosh." Neither were they a visiting baseball team. No, that was easy to see.

If we had followed the footsteps of these men for a week, it would have led us first to Caldwell Hall and later to the experimental fields, back and forth every day for a week. The average professor or student in Cornell was probably not aware of their presence, unless he happened to bump into them or glance into the lecture room at the east end of Caldwell. Yet they were there—one hundred salesmen, executives, and company presidents of a well known agricultural industry, come to Cornell to get first hand information which only an agricultural college could give them.

As Dean Mann said in his address of welcome to these men whom the Soil Improvement Committee of the National Fertilizer Association had brought together for conference, it was probably the first instance where an agricultural industry had gone to school to an agricultural college. Dean Mann also expressed the belief that it would not be the last instance, and in this he was correct. Already the Cornell meeting has inspired the Southern Fertilizer Association to hold three similar meetings at southern points this Fall.

The faculty at Cornell would hardly consider themselves salesmen, perhaps would not even enjoy the term, yet assuredly never was there made a more complete "sale" than this one at Cornell. Lyon, Mann, Cavanaugh, Fippin,

Buckman, Knudson, and the rest of the staff proved themselves past masters at salesmanship. Often during the week we might have found a man, well past middle age, rolling out of a comfortable bed at the "Ithaca," getting a hurried breakfast at a "dog," and making a "seven o'clock" out at the experiment field in order to study them—a little over and above the regular programme. Students who hark back to the agonies of an "eight o'clock" know that here indeed was a sale well made.

But what had the college to sell? Information—gained through long years of application to a job of service. Information of a highly specialized nature—just the information which these fertilizer men needed in their business—to make fertilizers of the best kind—to sell fertilizers which return to the user the biggest profit—to know which crops can profitably receive more fertilizer than they usually get—to develop new fields and new uses for fertilizer. This was information of great value to the men in attendance and because they realized the market value of it they "bought" freely and enthusiastically.

It is to be hoped that schools and conferences of this type may be held more often in the future than they have in the past. The farmer, the agricultural college men, and the agricultural industries—fertilizer manufacturers, lime manufacturers, machinery men—are all driving at the same point—a bigger farm production and a more profitable agriculture. They must all drive at this point—it is suicidal to do otherwise. Neither can succeed without the others and failure or lessened prosperity of the one must ultimately reflect seriously on the prosperity of the others. For altogether too long a time each of these groups of men have stood aloof



Two professional salesmanagers and a professorial salesman.

one from the other, and as a result there has been suspicion, superciliousness, and decided lack of coöperation between all three. Put two men or groups of men on opposite sides of a high board fence and it is not long before they are throwing bricks at each other. One cannot

see what the other is doing; therefore he must be doing something bad. Cut a hole in the fence and let the crowd filter through and soon they begin to make friends, borrow matches, and learn that the other fellow is human and just as

(Continued on page 106)

Doctor Bailey's New Book: "What is Democracy?"

AFTER reading *The Holy Earth*, a certain student of Dean Bailey's time here at Cornell, and who is now one of the most brilliant and most active agriculturists in this country, said something like this:

"Doctor Bailey has written this book by the fireside, with his boots off. There are many who will prefer the books he wrote when he still had his boots on."

What is Democracy?, recently issued by The Comstock Company as the fourth of Doctor Bailey's series of Background Books, is quite as abstract as *The Holy Earth*, *Wind and Weather*, and *Universal Service*. It is avowedly a "progression" of the same ideas which gave us these books. Not a war book in the usual sense of that phrase, it represents war ideas of the author on man and his relations to *The Holy Earth*, ideas crystallized by the "stress and fury" of war-time, and by its attendant economic and philosophic growths and inflations. It speaks not in general, but for the farming population.

In style as in subject matter, this fourth Background Book is a logical development from the other three. Simple, direct, terse; almost tensely abstract, and shot thru with those mannerisms which work their way naturally into anything Doctor Bailey writes and become an integral part of it; such is *What Is Democracy?*. Those who still reread the other Background Books will read this one quite as often, and with as good profit. Those who found in the first three books of the series no more than queer dreams, quaintly expressed, may also wish to reread this, the fourth. It will go against their grain, in style quite as much as in subject matter. The intense individualism of Doctor Bailey's style often leads him to remarkable lucidity, but as often attracts attention to the writer and away from what the writer is saying. For example, when he speaks of scheming politicians, "who love to ride in the

public eye," none can question but that he said it all in less than ten words. But such phrases as "mental posture" or such sentences as, "I mistrust there are other imperfect fruits still to gather" will beget wicked chuckles from the Doubting Thomases. They will call them "typical," which they most certainly are not, other than that they may be said to typify a philosophical abstraction from all personalities, both of the author and of his audience. Doctor Bailey does not appear to particularly care what his reader thinks, or even what he himself thinks at the moment; his concern is that his reader join him in an effort to deal with present affairs on a plane above present considerations, and in this manner seek to separate the true from the apparent. He is ever the philosopher, considering current affairs alertly and practically, but always in the light of where they are going. Toward such of these as do not appear to possess ultimate usefulness he turns a detached paragraph and leaves them inside out. Fallacies found at the heart of the most respectable schemes, "paper plans," "projects," "movements," and "programs" he leaves on the outside for the reader to grasp and reckon with. He, himself, has no program to offer, other than straight thinking from higher planes; in short, philosophy. The whole book is in protest against programs, but one does not close it with the feeling that the attack has been altogether destructive.

The argument opens in negation, reducing forty-five general programs and catch-words, (freedom, equal rights, socialism, the rule of the average man, and so on), from place in the democratic social structure to mere scaffolding. They may or may not be accessory to democracy, but they are not the real thing. The forty-sixth paragraph states the inevitable conclusion, "Democracy

is not a form of government, any more than religion is a form of worship."

The second chapter builds positively from the conclusion of the first. "Democracy is primarily a sentiment, a sentiment of personality. . . Its motive is individualism on the one hand and voluntary public service on the other. . . Responsibility, not freedom, is the key word. . . Coöperation, not competition, the password. . . . The basis of democracy is Service." And then the positive conclusion, "Real democracy is the perfect expression of religion, and a perfected religion is the destination of man."

Still speaking of democracy in general, the third chapter discusses hindrances, which tie to one thing, selfishness. It touches upon the present "triviality of the life of women . . . a staggering burden for a democracy to carry," and the tendency of efficiency to destroy individualism. "The machine dominates our philosophy. . . it runs the men."

This note of protest is carried into the rural field and, while no names are called, apparently is directed against the farm bureau and kindred movements, this in the last of the twelve "main considerations" of the next chapter. The protest takes two grounds: first, that standardization is utterly impractical in respect to the business of farming, a matter of biological adaptation of man to his environment; and, second, that the current attempt at such standardization "represents a powerful impersonal and anti-democratic drift. . . I know very well the effort everywhere to keep it democratic: this is evidence of its danger. I know no reason why projects of rural community work in New York and California should be approved by the Secretary of Agriculture." All such efforts, thinks the author, "rest on the idea of a perfect scheme, devised by superior intelligence and controlled arbitrarily as a matter of form. They do not allow of the free play of local needs and personal variations on which democracy, as distinguished from government, must rest."

Chapter Five has largely to do with the author's conceptions of anti-demo-

cratic influences being brought to bear upon the countryside from without. He shows how the present war between labor and capital is in prospect of developing a like antipathy between producer and consumer, and how fallacious, from the standpoint of democracy, is the towns' demand for cheap food. Cheap food makes for a lowered standard of living on the land, at a time when the standard of living in all other walks of life is being encouraged to expand. This is not only an unethical creation of a higher and lower class, the higher class being the consumer, but a conception disastrous to democracy as a whole, striking at its very fundamentals, which rest on the land. China, which is said to have achieved a "permanent agriculture" by some such double standard, is shown merely to have arrived at a stationary agriculture, with "no prospect of advancement and progress for the race as a whole, and no real democracy."

The next chapter pleads for a philosophical agricultural policy, on a world-scale, and the next, and last, advances a point of view on Chinese civilization, somewhat dissociated from the trend of the argument, but interesting.

Doctor Bailey may have written this book without his boots on, but his feet touch the earth—his "holy earth"—at all times. His work is admirable not only in poise, but in philosophic practicality. After all, before he came to sit by the fire, no man's boots went further along the rural road than did his own. He comes to his fireside from prodigious activities, and seems to examine these as scrupulously as he examines the current efforts of other men.

Many ardent rural workers who still have their boots on, who exult in activity, and who are achieving measurable advances within and among the present rural generation will not fancy some of the findings in *What Is Democracy?* But the book will not fail to meet the challenge with which they open it. And perhaps when they have finished reading, they, too, may wish to sit by the fire for a while and think. It is that sort of book.

R. L.

Neighborly Dramatics

The University Undertakes Something New and Gets Results

BY G. A. EVERETT

Professor of Rural Extension at Cornell University

IT was Commissioner of Agriculture Charles S. Wilson who originated the idea of presenting at the State Fair a practical demonstration of the staging and acting of several one act plays suitable to country communities. Accordingly he applied to Professor Sanderson of the rural organization department to find out what the College could do in the way of assisting the project. A local committee of Professor Sanderson, C. W. Whitney, and the present writer, all of the College, and A. M. Drummond, director of the Cornell Dramatic Club, took the matter up and it was decided that the enterprise be placed in charge of Professor Drummond. To him is due the marked success of the experiment, as it was an experiment.

A stage was erected in one of the old exhibition buildings; a rough, barn-like structure with white-washed walls. The hall has a seating capacity of three hundred and fifty, with standing room for about fifty more. The extra space was used at almost every performance. The decorations, scenery, lighting and entire arrangement of the stage were designed and constructed by members of the Cornell Dramatic Club, the purpose of the demonstration being to show how easily and yet effectively the same thing can be managed in any rural community. It is not boasting to say that in attractiveness and artistic merit The Country Theater was second to no exhibition at the Fair.

The plays presented were *The Neighbors* by Zona Gale, *The Pot o' Broth* by W. B. Yates, *The Workhouse Ward* by Lady Gregory, and *The Bracelet* by Alfred Sutro. These plays were all of a superior, one might even say "highbrow," quality, and yet with the human interest that makes them "go" with any audience. They "went" with the crowds at the fair. After the first day it was necessary to repeat the performance to

accommodate overflow crowds. Shows were given both forenoon and afternoon. During the week, audiences totalling six thousand persons witnessed them. Several hundred written applications were made for a booklet, which is in course of preparation, on the choice and presentation of plays.

There was most favorable comment in the press, notably in the Syracuse papers, the *American Agriculturist*, *The Rural New Yorker*, and *The New York Times*. In part the *Rural New Yorker* says, "There are many new features, and one of the most interesting of these, to the rural workers and residents, is the Little Country Theater. One act plays depicting rural life, easily staged, are given daily, illustrating the type of work that may be done in any rural community. The rapidity with which the hall fills for each session, and the large percentage of the audience who sign slips and leave them with the attendants asking for literature acquainting them with this work, shows the response of the people to help along this line. This may be said to be the most popular of any new movements demonstrated at the great exposition." *The Theatre Magazine* and the *Drama* also commented favorably on the venture.

Earnest approval of the movement is announced by Percival Chubb, of the Drama League of America. Professor G. P. Baker of Harvard dramatic school, has written Mr. Drummond, "If you demonstrate to the people of the countryside how relatively easy it is to give good plays well, and that it is just as easy, or easier to give good plays rather than poor ones, you will have done a real service, both to your community and the bettering of appreciation for drama in the country."

Zona Gale, author of *The Neighbors*, the favorite play at the Fair, writes,



A typical afternoon crowd, with horse-racing going on a hundred yards away

"The use of *The Neighbors* is offered free to any country theater which will use a part of the funds so raised to plant one long-lived shade tree, or a fruit tree, by the roadside, or a spruce or a balsam to be used as a community Christmas tree. One tree for every performance of the play. And if the producers wish to give really good measure for the use of the

play, it is recommended that they conclude the evening with a community gathering, with community singing and dancing, and a discussion of the things their community needs. Furthermore it is understood that the producers, the cast, and the audience at such performances shall all be neighbors to everyone, as long as they live."

Book Reviews

Farm Management, by Jacob Hiram Arnold, Agriculturist in the office of Farm Management of the United States Department of Agriculture, \$1.25 net. The MacMillan Co., New York.

In the words of the author, the principal aim of this book is to interest the reader in the point of view of farm management rather than to give specific technical information. It is intended primarily for use by farmers. The book contains few tables and treats in a rather elementary way some of the principles underlying successful farm management. After a preliminary discussion of what a farm is and of the historical development of farms in the United States, the book takes up the most important types of farming in this country and some of the factors that have influenced their development. The advantages secured by location, including soil, climate, and access to markets, are discussed and the importance of these factors in farm organization is considered. The book also discusses the control of natural factors of location by irrigation, drainage, or other means, the problems of farm organization, measures of efficiency of farm organization, business methods in farming, farm administration, and the relation of the farm to the State. The book contains little that is new, and the manner of presentation is often confusing rather than enlightening. The effort to avoid the technical has led, in some cases, to inaccuracy.

W. I. M.

Manual of Tree Diseases, by W. Howard Rankin, A. B. Ph. D., cloth \$2.50 net, The MacMillan Co., New York.

Another of the Rural Manuals series, edited by Dr. L. H. Bailey. Mr. Rankin has given the first comprehensive survey of diseases affecting both fruit, lumber, and ornamental trees. The book treats of the three general types of tree diseases, and describes the specific causes of these types. Then the diseases of each particular genus of tree are described under the common name of the

trees, as to symptoms, causes, and control. All the common trees of North America are included in the manual, and a special division relates to tree surgery. An appendix contains tables of synonyms for scientific nomenclature and a glossary of words used in a technical sense. A full index makes the book especially adaptable as a reference manual.

The Story of Milk, by Johan D. Frederiksen, \$1.50 net, The MacMillan Co., New York.

In this volume Mr. Frederiksen has made a valuable contribution to the educational propaganda for the popular esteem of milk and dairy products. Since understanding is prerequisite to correct appreciation of a food, we feel that such a book has a real function among the great body of consumers. The work, though untechnical in expression, is expository in style and thorough in treatment. Each phase of manufacturing milk-products is taken up separately, and adequate illustrations throughout clarify the text. By no means the least valuable portion of the book is the chapter of receipts pertaining to milk cookery.

The Conservation of Food Energy. By Henry P. Armsby, United States Department of Agriculture. 65 pages. Cloth, 75 cents net. W. B. Saunders Company, Philadelphia and London.

The author gives a concise statement of the relative amounts of food energy in the various crude forms of food. Inasmuch as the basis for comparison is only the total energy, not the proportion of available utility, the work seems to neglect an opportunity to contribute really useful information to the public. One point that is especially indicated is that it is efficient to feed stock only such forage crops as are inedible by man, since a loss of total food energy results from feeding grain to animals with a view to utilizing their flesh for food.

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Bertha Yerke

The death of Bertha Yerke, '16, came as a shock to her classmates and associates in county agent work. Miss Yerke was ill for some time with influenza and this was followed by tuberculosis which resulted in her death, May 25, at her home in Amsterdam.

During her entire college course Miss Yerke was a member of the advanced choir, was secretary of her class during the junior year, and a member of Risley House Committee during her senior year.

Following graduation she was a member of the staff of the home economics department as assistant manager of the cafeteria. From 1918 until her death she was home demonstration agent in the Niagara County Farm Bureau.

The following resolutions and message were sent to Miss Yerke's family from the department of home economics: "During her college course Bertha Yerke was excellent in scholarship, enthusiastic in her work; with rare social

and musical talents she was a leader in college activities; with a radiant personality she enriched all who came within her influence and was beloved as student, classmate, and friend. Be it, therefore,

Resolved: that altho in the passing of this blithe spirit to "the choir invisible" the Home Economics Staff, the Home Bureau managers, and her classmates suffer an irreparable loss, she will forever live in their hearts and memories; and also

Resolved: that a tangible evidence of their continuing love be embodied by re-binding in a choice and individual cover a volume of the Cornell Songs insepar-

ably associated with her memory, to be placed in the Department home; that her picture be mounted and this little record of her life be printed on the fore leaves of the book; and further

Resolved: that a copy of these resolutions be sent to her family and friends with an expression of the deepest sympathy of staff and students."



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ITHACA, N. Y., NOVEMBER, 1919

The Old Order Passes It was duly predicted and had to come sometime, so now that it has come it need not greatly surprise us. As a matter of fact, it doesn't. The rural world is taking it quite calmly with a certain measure of delight. The rural reaction, if we choose to call it such, is, in itself, quiet

THE reaction, as we see it, is against that naive idea (so beautifully demolished in Doctor Bailey's *What Is Democracy*) that the man who produces the food is there for the sole benefit of his more fortunate city brother, who has merely to eat it. As long as the food came out of that mysterious "space between cities" at low prices the towns simply took it and ate it, without so much as thank you, nor any great worry as to what manner of man produced it, nor of how things were with him. Only politicians bothered much about the farmer in those days, and even they not long after elections.

THEN came somewhat higher prices and—slowly as we saw it, but with lightning rapidity in respect to centuries of urban indifference—the towns became tremendously concerned about the man on the land. Population was increasing faster than the food supply; new land was about used up; unless something was immediately done to the farmer to make him grow more stuff per acre, the country was headed toward hunger. Excited appeals for more efficient farmers were heard in the land, and the country life movement got under way, propelled by urban excitation and dominated by that rather fanciful aspiration of "two blades of grass where one grew before."

IT WAS all right as far it went, but the one thing which most needed complete turn-about in city minds did not even stir. It is a hard thing to say, but the city's brief interest in rural affairs has been and is as completely selfish as was its long disinterest. The idea that country people are born for the convenience of city people still stands; one does not have to even read the headlines in the Hearst papers to find that out.

BUT for that, another time. It is not particularly the economic rebellion of the farmer that we speak of now; this is part, not the whole, of a wider reaction demanding not only "a full and comfortable living on the land," but recognition as human beings, with inherent rights to "a rural civilization that will be as complete and satisfying as other civilizations." This latter phrase Doctor Bailey penned as a prophecy; today it has become a common conception in the minds of plain country people who have never heard the phrase, as such.

THE great development of rural affairs during the present century was given start by the cities' sudden interest in more food, and has been more or less sustained by this interest. However selfish their motive, we have them to thank for the start. The thing which we have not appreciated, and need not, is their eternal insistence on the "two blades of grass," "where one grew before" (and at the same price), and the virtual exclusion of anything human and neighbourly in their attempts to "help" us. Efficiency, gentlemen, efficiency! That is all they would have us think and talk and dream on, in business hours and out of them. Following their lead we should, indeed, have nothing but business hours. In fact, we have to a surprising extent followed this lead, in our rural schools and colleges, in our rural papers, even in our rural churches!

SHOULD you doubt this, consider all of the papers you know that are published primarily for city people. How many of them are what we call "business" or "trade" papers? Now think of all the papers you know that are published for country people. How many of them are not "trade" or "business" papers, pure and simple? Does this mean that there is no demand for things of "outside" interest in the country? We think not; we believe it has simply been the tendency to follow town thot and consider things that way. A commercial editor, whose business it is to consider all rural publications, told us the other day that he wouldn't be surprised if *The Literary Digest* were not the most popular "farm paper" in the United States. Anyone in touch with country people must know that they are plainly reacting against a superabundance of advice on how to be efficient productive units, and are plainly indicating their desire to talk about something else as well.

Thanksgiving Rondeau

Let winter come, with leaden rain
Wild pounding on the window-pane,
With shriveled fields and skies of gray,
With blizzards shrouding both away;—
Blow wild, ye blust'ring winds, in vain!

When autumn winds brought cold and pain,
To those afield on far campaign,
Blood of our blood! We could not say
Let winter come!

But war is dead, in battle slain,
And true Thanksgiving comes again,
And some men pause to stoop and pray,
And some do not, but all men say
Sing ho! for autumn's hurricane,
Let winter come!

R. L.



Winter and Wall Paper

Summer greens have given over to dullness and blazed into final magnificence before the fall of the leaves. The winds come sharper with a threat to them. Almost all the trees are bare now. The zest of autumn is settling into the chill of winter, and it's time to come indoors.

Some there are who would object to calling any season cheerless, so we will not say quite what we think in this regard, or least we'll try to say it in a little different way. To us, the most cheerful thing about winter is that there are no flies to tickle the nose, nor to soil food and house furnishings. But there are, indeed, other compensations, and among the greatest of these lie the infinite possibilities of indoor life.

Take the question of wall paper, a first consideration. Papering a room generally associates itself with the fuss and confusion of spring cleaning, and fits well at that time in the matter of making only one mess, all at the same time. But a room freshly papered in the fall has certain points to recommend it. It will be most attractive at the time of year when the family will most make use of it. A summer of sun and flies will not have taken away from its freshness, from its new and cheerful aspect. More fancifully but none the less practically, there is a certain appropriateness and good sense in making indoors blossom out warmly and brightly at the same time that all outdoors is losing color and freezing up. This is the time of year that man most needs something of that sort.

So why wait for the spring to do that papering? Why sit thru the long winter evenings with worn, faded walls at the back of your minds, making the sitting room attractive only in the spring when you'll have to leave it for outdoors?

School Lunches

Do you remember, back in your grade-school days, how you used to envy the lunches that Johnnie and Sadie Smith spread to the covetous gaze of the group around the stove at noontime? Maybe you were a Johnnie or a Sadie, but again maybe you were simply like the writer, one of the many who had to wade thru a hasty mess of bread, butter, jam, bacon and paper while Johnnie and Sadie took the cake and mayonaise sandwiches. In our Dec. issue you will find an article telling how to put your children in the Johnnie and Sadie class. Not only is it good for children's digestions and self-respect; but you don't know how a whole family may often be judged and placed by just such things in the close community of the schoolroom.

The Reading Lamp

Attached to the article on School Lunches is an extended list of readings which persons interested may want to follow out. Most of the references are to farmers' bulletins, readily obtainable.

No fiction of rural bent that has come to light during the month is particularly worth reading. But if you think you can stand a whole evening's solid laughter, get hold of *The Young Visitors* by nine-year-old Daisy Ashford and sponsored with a preface by Barrie in his very best style. The humor of the book is entirely unconscious, and all the more delightful in its naivete. If you do not find the matrimonial aspirations of Mr. Salteena, his string of "idears," and his interview with the Prince of Wales of the "small but costly crown" things to drive dull care away, then you can know, without the slightest doubt, that your funny bone is out of joint.



Campus Notes

**Prof. Wing On
A. R. Fraudery**

Speaking to his class on The Dairy Cow, Animal Husbandry 10, on October 14, and tracing the development of advanced registry testing in America, Professor H. H. Wing said that isolated cases of fraud cannot permanently shake public confidence in such tests, any more than isolated cases of crookedness as they occur in any other business can shake confidence in their integrity as a whole.

"Since 1894, when the Babcock Test came into use," said Professor Wing, "the possibilities of fraud have been reduced to a minimum. No more than in any other business undertaking can the possibility of fraud be completely eliminated, but this possibility is very slight, and isolated incidents where records may have been falsified by no means destroy the usefulness, or reflect upon the integrity of the records as a whole.

"The wide publicity which has been given to alleged fraudulent results recently unearthed in the case of certain advanced registry Holsteins has no bearing upon the records of the breed as a whole, and will have no permanent effect on the breed."

Professor Martha Van Rensselaer, of the home economics department gave an address on the subject of thrift before the state convention of the Women's Christian Temperance Union at Binghamton on Saturday, October 11.

**Doctor Bailey
Home Again**

Doctor Liberty Hyde Bailey has returned from a summer in Europe, where he was principally engaged in botanical studies and in the collection of specimens for his private collection. When seen at his Ithaca home by a *Countryman* representative, he stated that this trip had completed the determinations of investigations which in the past have taken him into many parts of the world.

These investigations and studies have been under way for a considerable time. Two years ago, Doctor Bailey went to China to collect herbarium plants. His work carried him far into the interior of the country, and he brought home two thousand specimens representing nine hundred species. Last winter he stayed at the Arnold Arboretum of Harvard University, getting this material into available shape.

The majority of his time on the most recent trip, he passed at the Royal Botanical Gardens, Kew, England. Later he went to Scandinavia, and it was here that the determinations were finally completed. Before returning to this country, he also spent some time in Denmark, giving special attention to country life developments there. He expects to publish certain of his findings in the near future.

Cardinal Mercier and Lieutenant Colonel Roosevelt have been invited to visit Ithaca and to speak to the Cornell student body.

Winter Courses Start November 5

"One thing which makes the short winter courses offered at the state college appeal to many persons is that in the winter courses they study what they please," said a member of the staff in speaking of the coming session, which opens November 5 and continues through February 13. "They are not required to study a lot of things which they do not want. If they are interested in livestock, they can devote all their time to livestock. If they want to raise grains or vegetables or fruits or flowers, they can devote their time to any of these.

"At the same time they can take other subjects. Girls, for instance, may learn about foods, poultry and gardening if they desire to.

"In addition to the resident teachers in the college the students have opportunities to hear special lectures and listen to good music, to attend college gatherings, to see athletic games, and to take part in many college activities. The winter course debates and oratorical contests are a striking feature of the work and the winners of these take part in the program of Farmers' Week. The students meet young men and women from all parts of the state and often form life-long friendships."

The courses are tuition-free to residents of the state. A postal card addressed to the secretary of the state college at Ithaca, N. Y., will bring full particulars.

Professor W. A. Stocking, of the department of dairy industry spent the summer making a survey, for the Bureau of Chemistry of the United States Department of Agriculture, of the conditions under which butter is manufactured. The work took him into nearly every state in the Union west of the Hudson, altho he spent the most time in the Atlantic, southern, and western states.

Registration Largest in History

According to figures announced by President Schurman at the first convocation lecture for the year on Saturday, October 11, Cornell has now the largest registration in its history. At that time there were fifty one hundred and fifty-two regularly matriculated students. The largest registration at the corresponding time in previous years was in 1916, when there were forty-seven hundred and forty-six. President Schurman also stated that this increase of four hundred and six would in all probability be further increased by later registrations, and that he expected the total registration of the University to reach six thousand by the end of the year.

The College of Agriculture stands third in number of students with a total registration of eleven hundred and eighty. The College of Arts and Sciences has an enrollment of seventeen hundred and thirty two, and the combined Engineering Colleges of fifteen hundred and sixteen. Of the students in the College of Agriculture, twenty per cent are from outside the State.

Former editors and managers of *The Countryman* came together through coincidence at Pittsburgh during the latter part of August. They were Birge Kinne, now with the advertising forces of the *National Stockman and Farmer*, John A. Vanderslice, now with the sales force of the Hercules Powder Company, and E. B. Sullivan, doing advertising work for the Associated Farm Papers.

T. E. Milliman and L. A. Toan, assistant leaders in the Farm Bureau office, have left the College, Mr. Toan temporarily, and Mr. Milliman to become manager of the organization work of the Dairymen's League. Mr. Toan is on leave of absence to study sources of farm seeds in northern Europe, particularly in Scandinavian countries.

Professor Edmund L. Worthen came to Cornell in the summer of 1919 as extension professor in soil technology. He is a native of Illinois and a graduate of the University of Illinois. After graduating he became a soil surveyor in the Bureau of Soils of the U. S. Department of Agriculture. After spending three or four years in this work, he came to Cornell for graduate study and received the M. S. A. degree from Cornell in 1909. He returned to his work in the Bureau of Soils but soon left there to take charge of a number of experiment fields in different parts of North Carolina. This was part of the experimental work conducted by the North Carolina Agricultural Experiment Station and Professor Worthen spent several years in conducting the soil fertility investigation of these fields. About five years ago he went to the Pennsylvania State College as assistant professor of agronomy. In his work there Professor Worthen conducted college classes in soil fertility and was also connected with the soil survey work in that state.

Cornell was represented at the conference of the American Association of Teachers of Journalism, held at the University of Michigan at Ann Arbor, October 16, 17 and 18. Professor Bristow Adams, who has sixty two students enrolled in agricultural journalism this term, attended and addressed the meeting.

Thirty-seven institutions sent representatives. Among the speakers were: John B. Waite, University of Michigan; J. W. Cunliffe, Pulitzer School of Journalism, Columbia University; Arthur W. Stace, *Grand Rapids Press*; Floyd Miller, *Detroit News*; Richard L. Stokes, *Saint Louis Post Dispatch*; H. M. Bates, University of Michigan; President H. B. Hutchins, University of Michigan; William Allen White, *Emporia Gazette*.

Clark Leonard Thayer, who was an instructor in floriculture, has accepted a position as head of the department of floriculture at Massachusetts State College of Agriculture, at Amherst.

Dr. J. C. Bradley of the department of entomology, left the latter part of August for an entomological expedition through South America in search of specimens for the University collection. In a letter recently received by the department of entomology he tells of how, when his vessel had cleared the coast of Cuba, fire was discovered in the hold. The fire proved so serious that after a stubborn fight, lasting nearly a week, the boat put in at Santa Lucia where, with the aid of another ship, the fire was brought under control. In the cargo were four collections of North American insects for the museum of Sao Paulo at Rio, Brazil, which Dr. Bradley is most certain were destroyed. The engines being badly damaged, the ship was unable to continue, staying for some time at Santa Lucia where Dr. Bradley obtained a few specimens which are now in the hands of the entomology department here. Dr. Forbes, of the same department, plans to join Dr. Bradley in the spring, when they will traverse the Amazon.

Over one hundred persons from each of fifteen Study Clubs in the vicinity of Ithaca picniced at the College of Agriculture, Friday, October 10. The picnic is an annual affair arranged by the department of home economics, which sends out invitations to nearby clubs to visit the State College and enjoy a picnic dinner on the grounds.

The program as arranged for the day by Miss Claribel Nye, of the home economics department, who acts as State Leader of Cornell Study Clubs, included community singing on the roof garden of the department building, after which the clubs and members of the College faculty enjoyed a picnic dinner together. Following the dinner a brief address was given by Dean A. R. Mann in which the relationship of groups whose thought is stimulated by reading and studying together to the development and progression of the home and community life was emphasized. Interesting reports were given by representatives of the different clubs. A tour of the College buildings

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Former Student Notes



'94 B. S. A.—Harry Hayward, who served as director of agriculture in the A. E. F. University at Beaune, France, has resumed his work as Dean of Agriculture at Delaware College.

'98 B. S.—Louis H. Hood is a wholesale dealer in coal at Seneca Falls.

'99 B. S.—J. Emery Ward, formerly a lieutenant in the air service, has a position with the Mercury Manufacturing Co., 4118 South Halsted Street, Chicago, Illinois.

'02 B. S.—Professor Herbert H. Whetzel published in *SCIENCE* for July an article on "Democratic Coordination of Scientific Efforts," based on an address delivered before the joint session of the Botanical Society of America last December.

'05 Sp.—Second Lieutenant Henri Pochet, who has been in the French army since 1914, has been cited three times for bravery. The first citation was received in October 1915, and carried with it the Cross of War. His second citation, received in January 1916, carried with it the Military Medal.

'05 M. S. A., '07 Ph.D.—J. Eliot Coit returned to Berkeley, California last August after about twenty months' service as agricultural agent in Los Angeles County. He is professor of citriculture at the University of California and writes that there are eighty-three hundred students at the University this term. Professor Coit was Editor-in-Chief of *The Countryman* in 1906.

'08 B. S. A.—Chester J. Hunn is with the Division of Horticultural and Pomo-

logical Investigation, Bureau of Plant Industry, United States Department of Agriculture, Washington, D. C.

'09 B. S. A.—Edward H. Thomson has been appointed president of the Federal Land Bank of Springfield, Massachusetts. He has been connected with the United States Department of Agriculture for a number of years and recently resigned as chief of the bureau of farm management to take up the management of his several farms thruout the state.

'11 B. S. A.—Waldemar H. Freis has a position with the American Agricultural Chemical Co., 879 Drexel Building, 5th Street, Philadelphia, Pennsylvania.

'11 B. S.—Clarence S. Lomax is chief engineer of the American Coke and Chemical Co., 208 South LaSalle St., Chicago, Illinois.

'11 B. S. A.—Ray E. Deuel has been appointed manager of the Onondaga County farm bureau.

'11 B. S. A.—Edward M. Tuttle was married October 2, 1919, to Viola A. Culver of Washington, D. C. They will be at home after November 1 at Resinwood Farm, East Moriches, L. I.

'12 B. S.—E. P. Smith while touring through the State stopped at the College of Agriculture the other day. He is planning to carry on a series of tests with pure bred Holstein cattle this winter on his farm at Sherburne.

'12 Ex.—George C. Salisbury is running a dairy and poultry farm at Randolph.

'12 Sp.—T. E. Milliman has gone to New York City to take charge of the organization work of the Dairyman's League.

'13 B. S.—Lee W. Crittenden, upon leaving college, taught four and a half years, and is now county agent of Middlesex County, New Jersey.

'13 B. S.—Gertrude A. Marvin has returned to her home in Wilkesbarre, Pennsylvania, after several months' war work in Europe. She has taken complete charge of her father's florist business in Wilkesbarre.

'13 B. S.—Ensign Mauris Rothstein is assistant to the Naval Inspector of Ordnance at Bedford, Ohio. His permanent address is 246 Main St., Johnstown, Pennsylvania.

'14 B. S.—Katherine Keating is a teacher of cooking, drawing and English in Camillus High School.

'14 B. S.—Claribel Nye is leader of Cornell Study Clubs and instructor in the home economics department here.

'14 B. S.—Donald B. Rice has been appointed farm supervisor of Trenton, New Jersey.

'14 B. S.—Private Leonard C. Treman, who went to France as an ambulance driver in July, 1917, has been decorated with the Croix de Guerre with star, for courageous service.

'14 B. S.—Lieutenant Robert K. Lloyd is in charge of the photo detachment at March Field, California. His address is La Verne Court, No. 1, Second and Main Streets, Riverside, California.

'14 B. S.—Stanley H. Watson was discharged from the service on June 17, 1919, and is now with the Cleveland Tractor Company. His address is Hotel Regent, Cleveland, Ohio.

'14 B. S.—Theodore B. Crippen is foreign executive of the Vacuum Oil Co., 61 Broadway, New York City.

'14 B. S., '14 M. F.—William J. McCarthy has been a forest assistant in the Jefferson National Forest since September, 1917. His mail address is in care of the Forest Service, Box 1746, Great Falls, Montana.

'14 B. S.—Dudley Alleman is doing market investigation work for the United States Department of Agriculture and is in charge of the Bureau of Markets office in Detroit, Michigan.

'14 B. S. — Edna E. Alderman is teacher of home economics at Calun Creek District High School, West Virginia.

'14 B. S.—Fannie D. Boone was married February 21, 1919, to Albery Carney.

(Continued on next page)

He Grows Those Western Apples

'05 Sp.—One of the men who grows the apples which East and West argue over is E. R. Moller of Hood River, Hood River Valley, Oregon. His home is shown in the accompanying photograph.

Mr. Moller has forty acres, eight of which, being hard to cultivate, are given over to buildings and pasturage. The other thirty-two acres are in apples, alfalfa, clover, cover crops, oats, and vetch. Two horses do the work, and two high grade Jersey cows constitute a home dairy. Mr. Moller expects to get rid of his grades and take on pure-breds during the coming year.

The house is of the bungalow type



so popular on the Coast. It is equipped with running water and electric lights. In reply to our question "What kind of a car have you?", Mr. Moller has first written "Ford" and then scratched it out, writing "Dodge." We judge that business is booming.

'14 B. S.—Edna Becker is student dietitian, New Haven Hospital.

'14 B. S.—Grace Bristol was married to Roger H. Cross, '14, on November 13, 1917.

'14 B. S.—Lucia Burbank was married to Charles Bennett in June, 1918.

'14 B. S.—Agnes Keane is a teacher of domestic art in Virginia.

'15 B. S.—E. F. Hopkins has gone to Auburn, Alabama, as assistant pathologist of the State Experiment Station.

'15 Sp.—Pearle Viola Decker has a son, Roger Hicks, born August 11, 1918.

'15 B. S.—Francis D. Edwards is association manager of the City Cafeteria, Ithaca.

'15 B. S.—Helen N. Estabrook is instructor of home economics at Morrisville.

'15 B. S.—Sara Townley Jackson is teacher of homemaking and history at Avon High School, Avon.

'15 B. S.—Jane F. Montrose is teacher of homemaking at Kings Ferry.

'15 B. S.—Ethel L. Phelps is in instructor in the University of Minnesota.

'15 B. S.—Bertha Titsworth is head of home economics extension and state leader, New Hampshire College, Durham, New Hampshire.

'15 B. S.—Elon H. Preiss is now with the H. J. Heinz Co. His address is 216 Court St., Bowling Green, Ohio.

'15 B. S.—Paul Watson Wing was married June 24, 1919, to Anna Cornell Kerr, daughter of Mr. and Mrs. William Ogden Kerr of Ithaca. They are at home in Little Falls.

'15 B. S., '16 M. S.—Victor H. Ries is professor of botany at the Iowa State Teachers' College, Cedar Falls, Iowa. His address is 809 Eighteenth St.

'15 B. S.—Helen T. Blewer is teacher of cooking, sewing and chemistry, at Owego Free Academy.

'15 B. S. — Mabel Clare Copley is supervisor and teacher of sewing and cooking at Danbury, Connecticut.

'15 B. S.—Helen Comstock is emergency home demonstration agent of Delaware College, Newark, Delaware.

'16 B. S.—W. B. Cookingham has taken a position as supervisor of agri-

cultural education in the secondary schools in the State of New Hampshire. His headquarters are at Concord. He will also give one course in rural education at the New Hampshire State College during one term of the year.

'16 B. S. — Stuart Wilson has been recently discharged from the Army and is now working for the Goodyear Tire and Rubber Company, at New York City.

'16 B. S.—Birge W. Kinne is selling advertising space for The National Stockman and Farmer, Pittsburgh, Pennsylvania.

'16 B. S., '18 M. F.—Louis A. Zimm is extension forester for the State College of Agriculture at Athens, Georgia.

'16 B. S.—Lucy Bassett is secretary of the Associated Charities at Ithaca.

'16 B. S.—Helen Van Keuren is in France engaged in recreation work directed by the Y. M. C. A.

'16 B. S.—George L. Cooper is with Neustadt and Company, 294 Ninth Ave., New York.

'16 B. S.—Bessie M. Spafford is an instructor of home economics in the State Normal School, Farmington, Maine.

'17 B. S.—R. A. Perry has been testing butter for the United States Navy during the past summer.

'17 B. S.—Jean Paul Griffith has been appointed scientific assistant in horticulture at the U. S. Experiment Station, Mayaguez, Porto Rico.

'18 B. S.—Mr. and Mrs. Edward Breen of Newark, New Jersey, have announced the engagement of their daughter, Ruth Baldwin, to Dudley Barncie Hagerman, of Southold, Long Island.

'18 B. S.—Miss H. A. Torbert is manager of the Cascadilla Cafeteria, replacing Mrs. Elliott who resigned last spring.

'18 B. S.—"Stan" Sisson was married on Saturday, September 13, to Esther M. Merritt at Trinity Church, Potsdam. Mr. and Mrs. Sisson will reside in Potsdam where Mr. Sisson will devote himself to forestry work. He was recently discharged as a lieutenant in charge of one of the newest types of destroyers in the European fleet.

SIMPLICITY

of the

DE LAVAL



Simplicity in cream separator construction avoids waste and makes possible quick and easy handling of milk.

The De Laval Cream Separator is remarkably simple. Thousands of De Laval's are run and cleaned by children every day.

This simplicity means long life and freedom from repairs, and is the outcome of over forty years of unquestioned leadership in

cream separator inventing, developing and perfecting.

Every part has been developed to its highest degree of simplicity coupled with efficiency and the De Laval has earned for itself the name of being "the world's standard separator."

More De Laval's are in use than of all other makes combined

See the local De Laval agent or, if you don't know him, write to the nearest De Laval office as below

THE DE LAVAL SEPARATOR CO.

165 Broadway
NEW YORK

29 East Madison Street
CHICAGO

61 Beale Street
SAN FRANCISCO

Tell Advertisers Who Introduced You

'18 D. V. M.—Edwin J. Frick is now veterinarian with the New York Women's League for Animals.

'18 B. S.—Walter C. Crocco is a chemist with the Nestle's Food Company, Chenango Forks, New York. His home address is 1186 Forty-third St., Brooklyn.

'18 B. S.—Edward Monahan, Jr., has a position as herdsman with A. B. Cook, Canton, Montana.

'18 B. S.—M. P. Moon is instructing in the department of dairy industry.

'18 B. S.—Charles F. Gilman, who was recently discharged from the service, is working in the sales department of the International Harvester Company of New York.

'18 Ph.D.—Nemesio B. Mendiola is assistant professor of agronomy in the University of the Philippines. His address is Los Banos, Laguna, Philippine Islands.

'19 B. S.—T. E. Gaty is assistant horticulturist at the New York State Experiment Station at Geneva.

'19 B. S.—F. C. Dietz is teaching agriculture in the high school at Geneva.

'19 B. S.—H. B. Ortner has been appointed an assistant in the department of physical training here. His special work is with inter-fraternity and inter-mural athletics.

'19—Melville Kurzman died of influenza at the Cornell Infirmary on October 19, 1918. He enlisted in the U. S. Naval Reserve Force in September 1918, and on October 13 was assigned to the Naval Unit of the Students Army Training Corps.

'19 — Albert T. Coumbe returned to America last April for a furlough, after five years' foreign service with the Standard Oil Company of New York, spent in Java, Borneo, Celibes and other islands of the Dutch East Indies. He has now returned to Java.

'19 B. S.—Daniel B. Brooks is selling tractors for the General Ordnance Company, Cedar Rapids, Iowa.

'19 B. S. — C. G. Welles is taking graduate work in plant pathology, bacteriology, and entomology at the University of Wisconsin. He also has an assistantship in the bacteriology department there. His address is 1717 Regent St., Madison, Wisconsin.

'19 ex.—John F. Lane was discharged from the U. S. N. R. F. on July 15, at Charleston, South Carolina, and on July 21 was married to Miss Grace M. Trafford of New York City. Lane is now back in the University and expects his degree in February '20.

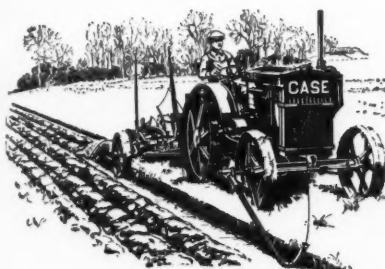
'19 Ex.—William Wallace Tomlinson was killed in action November 1st, 1918.

'19 Grad.—H. E. Knowlton, formerly an assistant in the botany department, has been appointed assistant professor of pomology at the West Virginia College of Agriculture at Morgantown.

'20 Ex.—Bentley L. Craig has decided to change from agriculture to dentistry and has entered the University of Buffalo this fall to take up that course.

'19 B. S.—A. F. Lockwood at the termination of summer school, went to Chateaugay, where he is teaching agriculture in the High School.

THE December number of the *Cornell Countryman* will be mainly devoted to animal husbandry interests. For this reason, the Editors have decided to withhold the second of Mr. Eastman's Dairy Organization articles until this issue. It is called, "How the Dairymen Organized" and is, in our opinion, a most exceptional article, and one certain to interest anyone concerned in the present dairy situation in New York State.



Remember This Trade Mark
as Well as the Name of

CASE

The world-famous trade mark of the Eagle on the Globe identifies all machinery manufactured by the J. I. Case Threshing Machine Company.

Now, here's a straightforward, heart-to-heart statement of why you should know what this trade mark means to you—why you should give preference to farm machinery on which it appears.

You know the advantage and value of experienced, reliable farm help—the kind you can depend on through “thick-and-thin;”—the kind that “sticks” the year round if you need it!

That's exactly what you get—in mechanical form—when you buy machinery built by this company and bearing the good old trade mark of the Eagle on the Globe.

This company has been building superior machines for farmers for 77 years—probably long before you were born! Often our machines have been a little higher in price than others; but you could bet your bottom dollar on their dependability in “a pinch;”—on better work and more of it and over a long period of years.

Look for the trade mark of the Eagle on the Globe on

Kerosene Tractors	Rock Crushers	Silo Fillers	Baling Presses
Steam Rollers	Threshers	Steam Tractors	Road Graders

9,000 dealers and 31 branch houses throughout the United States will take care of you in the matter of sales, service and supplies. Apply to any of them for detailed information, or direct to us.

J. I. CASE THRESHING MACHINE COMPANY, Inc.

Dept. BX RACINE, WIS., U. S. A.
Making Superior Farm Machinery since 1842



NOTE—We want the public to understand that our plows are NOT the plows made by the J. I. Case Plow Works.



To avoid confusion, the J. I. CASE THRESHING MACHINE COMPANY desires to have it known that it is not now and never has been interested in, or in any way connected or affiliated with the J. I. Case Plow Works, or the Wallis Tractor Company, or the J. I. Case Plow Works Company.

Drainage as Insurance

(Continued from page 68)

But now the power ditchers have largely replaced the horse-drawn or even the tractor-drawn type. The state owns a large number of such ditchers. They are under the direction of the various farm bureau agents. The state sends a civil engineer to set the grade stakes and lay out the work, and an experienced operator for the digger. This system seems to be the most satisfactory. The machine can cut as deep or as shallow as is desired in almost any hardness of soil; and the operation interferes very little with the regular farm work. The farmer has only to lay the tiles and re-fill the trenches. This can be done almost entirely with the team and plow.

Too often one hears the remark, "Yes, I know that land ought to be drained, but, you see, I can't afford it." The fact is that the poorer a man, the greater the need of bringing his land under profitable

cultivation. The money he needs is right there, locked up in the soil, inert, fairly pleading to be redeemed. The author has installed many drainage systems which paid back the initial investment in the first year, but even if it required, say, a third year to get it back, no other investment can be better. In the long run, the return is certain. There is no longer any need to worry about wet years; that is all taken care of and insured against.

Another result of drainage, more often neglected than noticed, is none the less important. The reaction upon the farmer himself can not be too highly valued. A man progressive enough to drain his land takes a new and added interest in his business. He joins forces with the Progressives in agriculture. He gains self-respect, and the respect of all thoughtful and farsighted men.



The Practical Collar

Gives Horses A "Fair Shake"

Here is a collar that makes work easier for horses, saves them no end of painful injury and gives them a "Fair Shake."

FitZall Adjustable Collars

Instantly Adjusted to Fit Any Horse, Fat or Thin

It is the best protection against sweeny, boils, galls, scalds and all the injuries that come from ill-fitting collars and hot, lumpy sweat pads. If the horse changes flesh you can change the FitZall Collar to suit. Change it from one horse to fit another as quickly as you can buckle the ordinary collar.

It is simply the ordinary collar with a sensible change that makes it vastly better. Try it. Every collar is absolutely guaranteed. Dealers sell FitZall Collars at the same prices as other collars of equal grades. If yours can't supply you we will. Write for full description and prices.

John C. Nichols Co.

Manufacturers and Distributors
119 Erie St. Sheboygan, Wis.

Makers of the Famous Master-Brand Harness—America's Best



Say Where You Saw It When You Write

November--Ditching Month



Ten Miles of Ditches Like this were Dug with **HERCULES DYNAMITE**

It's good farm practice *right now* to deepen and clean out old ditches, dig new ones, or straighten the course of that meandering stream through the back pasture. ¶ On many farms, one man with Hercules dynamite can do the work of six men with picks and shovels, and take out earth at lower cost per cubic yard. We have figures to prove this. ¶ Write our Agricultural Department and state the length, width and depth of your desired ditch, the kind and condition of the soil, etc., and let us tell you the percentage of dynamite to use. If the work warrants it, we will send an agricultural service man to your farm, after shipment of Hercules dynamite and blasting supplies has been purchased from your dealer. He will show you and your help how to use dynamite in ditching and for other purposes on the farm. ¶ Send for a copy of "Progressive Cultivation" and learn all about the use of dynamite for ditching, stump and boulder blasting, tree planting, and subsoiling.



The Agricultural Department
HERCULES POWDER CO.
Wilmington Delaware



Please send me a copy of "Progressive Cultivation". I need dynamite for

Removing.....stumps from.....acres
Digging.....rods of ditch
Removing.....boulders from.....acres
Planting.....trees Subsoiling.....acres
Name.....P. O.....State.....

Tell Advertisers Who Introduced You.

The College and the Country Paper

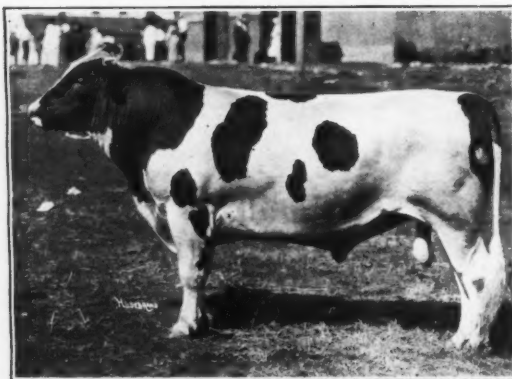
(Continued from page 71)

of Agriculture in a comparatively short time has gone somewhat farther in this field than any other institution.

There are a number of advantages to the work, both for the College and for the newspapers. In the first place, the life of the country weekly is becoming more and more precarious as the large city dailies reach out into the rural districts. It is becoming more and more difficult for the country publisher to make a living. Anything that will help him to earn a livelihood, therefore, is eagerly welcomed on his part. Furthermore, practically every community needs a county paper in order that it may maintain its entity as a community, and in order that the wholesome neighborhood news which would not find a place in the larger daily from outside may

keep the community in the good old-fashioned neighborhood relationships. Everything which tends to break down these relationships, and to take away from the intimacies that should exist between persons of kindred interests in the country is a serious menace to rural social life. It is for these reasons that the College thoroly believes in the country weekly and in the work which it is trying to do for the benefit of the weekly.

In the December *Countryman*, Professor Cavanaugh will comment on the Ross fertilizer "revolution" (see page 69).



Would you like to see a portrait of your favorite Cow, Bull, Sheep, Horse or Dog on this page? If so, send photos with name of Animal and Owner and other interesting data. ¶ We want to run an interesting stock picture each Month and need your assistance. All photos will be carefully returned.

Ithaca Engraving Co., Ithaca, N. Y.

Photo Engravings for all Printing Purposes

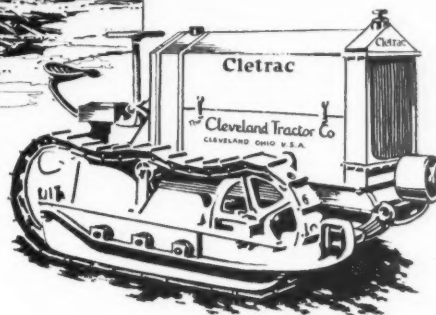
Say Where You Saw It When You Write



Cletrac

TANK-TYPE TRACTOR

(Formerly known as the Cleveland Tractor)



No Off Season for the Cletrac

THERE is no "off season" for the Cletrac. It is a year-'round investment paying the farmer a steady interest from January to December.

When there is nothing for the Cletrac to do in the fields it can be kept profitably busy on hauling jobs or belt work. It knows no equal at dragging dead weight and is a master at farm belt work.

The Cletrac runs on metal tracks like a locomotive. No extra power is required to push it *through* the soil---it goes *over the top* of the ground and puts all of its power into pull, where it belongs.

And lining up for a belt job is a matter of a very few minutes. The Cletrac is rated at 20 belt horse power but under test has developed better than 24.

The Cletrac operates on a very small amount of kerosene, distillate or gasoline. It does more work, more days in the year, and does it better, cheaper and quicker than horses or mules or other types of tractors.

Our book on practical power farming will be a big help to any agricultural student. Ask for "Selecting Your Tractor." It's free.

The Cleveland Tractor Co.
Cleveland, Ohio

LARGEST MANUFACTURERS OF TANK-TYPE TRACTORS IN THE WORLD.

A Higher Ideal

There would be no advantage in devoting the most valuable years of one's life to gain knowledge and experience, if greater possibilities and achievements were not forthcoming.

It is then proper to assume that because of his exceptional scientific training the agricultural college man is progressive, well advised in the most modern dairy practices and the methods that are likely to make dairying the most profitable.

You know that profitable dairy production cannot succeed without cleanliness, and you should also know that



is capable of maintaining a cleanliness that is productive of the highest quality dairy products, because it is used for thorough and sanitary cleaning by all Agricultural Colleges in the United States and Canada.

Ask your supply man to fill your order. It cleans clean.

Indian in circle



in every package

The J. B. Ford Co.

Sole Mnfrs.

Wyandotte, Mich.

Campus Notes

(Continued from page 85)

and the farms was made in cars and trucks provided by the College after which the clubs were given an opportunity to hear the University organ at a special recital given by the University organist, James T. Quarles.

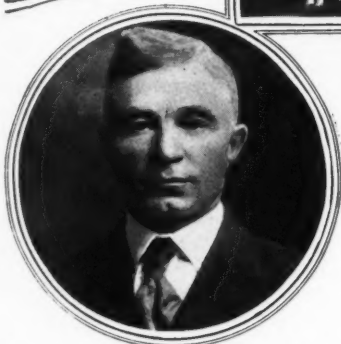
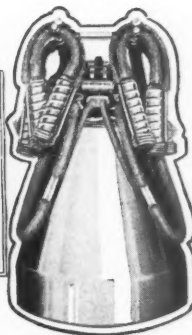
Cornell Study Clubs are local organizations made up of individuals who wish to get together to study scientific ways of conducting home work in order to preserve the best interests of the family. There are at present eighty-nine clubs scattered thru thirty one counties of the state. Programs for the clubs are worked out using the Reading Course bulletins as a basis for study. The subjects are food, civics, health, thrift, and community betterment.

The forty-third annual meeting of the New York State Dairymen's Association, of which Professor H. C. Troy is president, will be held at Jordan Hall, New York Agricultural Experiment Station, Geneva, on November 18, 1919.

Many prominent alumni returned to Cornell to take part in the Endowment Fund campaign which started October 11. Thomas W. Lamont, financial adviser to the government at the Peace Conference. Congressman Daniel A. Reed, and J. DuPratt White, alternate chairman of the Endowment Campaign, were the speakers at a dinner given by President Schurman and the trustees of the University, at Prudence Risley Hall.

A conference of county agricultural agents, extension specialists, county and city home demonstration agents, and farmers' institute workers was held October 27 to November 1. The first two days the conference met in Geneva at the State Experiment Station; the last three at the College here. The purpose of the conference was to consider, as far as possible, all the problems of the farmer in New York State. Each day

Tell Advertisers Who Introduced You



Mr. Akins Says the Perfection Milks More Gently

"Our Perfection is the best milker we've ever had," said E. J. Akins when asked how he liked his milker. He held up his hands and looked at them. "You know

at this time of year when a farmer is using tools, his hands get stiff and hard and no matter how much he tries to milk gently, he simply can't do it. His hands hurt the cows and the milk falls off. I've seen it happen many a time. But since we've been milking with the Perfection, our cows are milked with a gentle downward squeeze the year 'round. The cows like it better than hand milking."

The Boys Do Milking Now

"I hardly ever milk any more myself. My two boys, 12 and 14, handle the job alone with the Perfection Milker. I can tell you there's nothing more popular around this place than our Perfection. "Our Perfection Milker has been just like a catching disease in this neighborhood. As soon as I got it everybody else saw it and wanted it. There are quite a number of Perfections around here now."

Send for Names, Addresses and Catalog

It's not necessary to add anything to what Perfection owners say. Their own words are selling Perfection Milkers as fast as they can be installed. We'll gladly send you names and addresses so you can investigate for yourself. Also a free copy of "What The Dairyman Wants To Know," the great book which answers every question about milking machines. Write. Today.

Perfection Manufacturing Company

2142 E. Hennepin Avenue
MINNEAPOLIS, MINNESOTA

PERFECTION MILKER

Say Where You Saw It When You Write.

HYPOZONE

"THE ORIGINAL HYPOCHLORITE"

Disinfectant Deodorant
Antiseptic Dairy Sterilizer Germicide

It is a clean, colorless, odorless liquid which mixes readily with water and at small cost will keep your stock in healthy condition at all times.

Veterinarians say "Dairy Hypozone" is the best antiseptic, powerful and reasonable in price.

Our booklets "The Ounce of Prevention," "Healthy Poultry," "A Sanitary Farm," "Sterile Bottles," "Cleaner Milk," "Better Butter," and "Finer Cheese" are waiting for you.

Single Gal., \$2.40; Five Gal. (Carboys), \$9.50. Shall we send you some on our liberal 30-day offer?

From your supply dealer or

The Woolf Laboratories, Inc.
230 Greenwich St. New York

For Farm Butter & Cheese Making HANSEN'S Dairy Preparations

PURE, concentrated, ready to use, absolutely reliable. Giving uniformly best results in the country's finest creameries and cheese factories.

For Cheese - Making: Hansen's Rennet Tablets, Junket Tablets (for Cottage Cheese), Cheese Color Tablets.

For Butter-Making: Hansen's Danish Butter Color (4 oz. and 1 oz. bottles,) Hansen's Buttermilk Tablets or Lactic Ferment Culture for perfect ripening of cream for butter and milk for cheese and commercial buttermilk. Sold by drug and dairy supply stores, or direct by

Chr. Hansen's Laboratory, Inc.
Little Falls, N. Y.

Interesting treatise "The Story of Cheese" by J. D. Frederiksen, free on request.

was given over to a special group of problems and to the reports of the committees on these problems. Addresses and reports were given by leaders in the various fields, ranging from problems in the practical improvement of plants and animals to the discussion of cooperative projects of all kinds.

Professor C. R. Crosby, of the Department of Entomology, is in Washington for a hearing before the Congressional Committee in regard to a request for appropriations to be used in controlling or exterminating the European corn-borer. This pest is becoming so formidable that efforts are being made to keep it from our large western corn fields.

At the seventh annual meeting of the American Association of Agricultural College Editors at the University of Ohio last June, this College of Agriculture was represented by Professor Bristow Adams and M. V. Atwood. Professor Adams was president of the Association during the past year. Mr. Atwood was elected secretary for the current year.

The College of Agriculture recently announced that it distributes annually three million pieces of publicity matter, including an average of seven thousand a week in answer to individual requests. During 1918, fifty-four different bulletins were distributed free of charge thruout the state.

A pamphlet giving the name and number of the various publications, has been compiled by the college and is ready for distribution. The pamphlet classifies the publications under two heads, "The Farm," and "The Home," each of which is subdivided into lists of interest to those connected with the different phases of the work.

There is also a list of experimental bulletins that are distributed only to libraries and persons interested in agricultural research. Professor Bristow Adams, who is in charge of this work,

Say Where You Saw It When You Write.



JOHN DEERE
He Gave to the World the Steel Plow

Be a Business Farmer

Your school has earned fame because of the great aid that it has given in making farming a better business.

You are in school to equip yourself to make farming a better business.

When you leave to begin the active work of farming you can do full credit to your school and to yourself only by being a good business farmer right from the start.

That's when you and John Deere implements will be on common ground.

These implements are continually going out from the sixteen John Deere factories to help make farming a better business.

For 80 years they have been the choice of the majority of good business farmers—of men who want the best implements they can get.

You will find John Deere implements and machines ready for you—for practically every farming operation.

And every one of them will do the utmost to help you make good with your plans for making farming what it ought always to be—the best business in the world.

John Deere, Moline, Illinois

employees nineteen assistants in the editorial and executive branches of the extension department.

Assistant Professor L. H. McDaniels, of the department of pomology, is in Asia Minor on leave of absence. He went there to assist in agricultural reconstruction but writes that, because of the serious food shortage, most of his work thus far has been in feeding the people. He was recently sent into Armenia, where he is one hundred and fifty miles from the nearest railroad. Mr. H. A. Phillips, of the University of Missouri, is taking Mr. McDaniels' place here until his return next year.


One of the features of the National Dairy Show which was held in Chicago on October 6, 7, 8, was the twelfth annual Student's Cattle and Dairy Products Judging Contest. The Cornell Cattle Judging team, composed of F. J. Oates '20, J. M. Beiermeister '20, and M. G. Beck '20, won the Ayrshire Cup.

The Dairy Products Judging Team, composed of L. E. Smith '20, D. E. Morris '20, and C. R. Keeler '20, took sixth place in a closely contested field. The two Cornell teams were under the direction of Professors H. H. Wing and W. A. Stocking.

Harvard has asked the University Athletic Association for a dual crew race on Cayuga Lake, May 22.

I. R. Houston '20, was unanimously elected president of the Cross Country Club at its first meeting, October 7.

A record breaking enrollment of one hundred and one freshmen, brings the total registration of students in the department of home economics to two hundred and forty two. Thirty courses are now offered by the department which is, at present, made up of nineteen members engaged in residential teaching and eleven others connected with the extension work of the department.



The Wiser Way To Increase Dairy Profits


Wise dairymen have discovered that the way to increase profits is to get more milk without increasing the production cost. This method is made easier than any other by International Special Dairy Feed.

This great ration is efficiency applied to feeding. It is designed to make more milk. Has just the proper elements in the correct proportion. It cannot fail. Yet it costs no more than any other feed. In fact it will cost less than a whole grain feed besides giving you a profit from selling the grain. Order a ton for trial. Apply to the mills if your dealer cannot supply you immediately.

International Sugar Feed Co.
Minneapolis . . . Minnesota

INTERNATIONAL

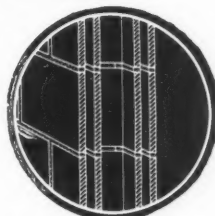
Special Dairy Feed



Say Where You Saw It When You Write.

Insures Cow Health

THE insulating blanket of still air in a Natco stable wall prevents sudden temperature changes. It protects the health of your cows and keeps up the milkflow in uncertain weather. Natco Hollow Tile walls do not gather moisture as do walls of solid masonry, nor do they absorb grease, dirt or foul odors.



Section of Natco wall showing still air spaces

Natco Barns

are a permanent *investment*—not an expense. They need no painting and very seldom require repairs. They withstand severest windstorms and are fire-safe, being constructed of burnt clay tile. Natco walls are exceedingly strong. Masons lay up these walls very rapidly, easily handling the large-size units.

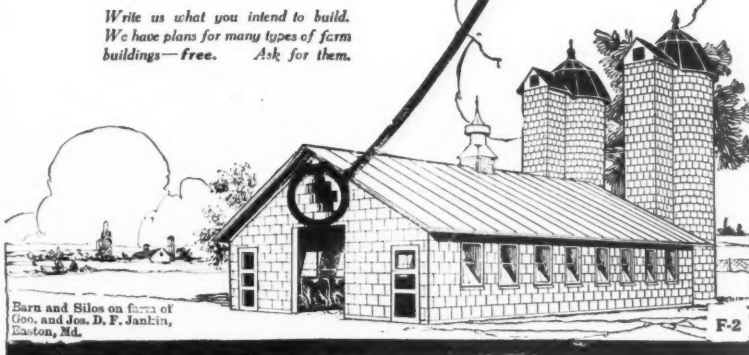
Whatever you intend to build, build it with Natco Hollow Tile. Many uses are pictured and explained in our book, "Natco on the Farm." Write for it today—*free*.

National Fire Proofing Company

1201 Fulton Building Pittsburgh, Pa.

23 Factories assure a wide and economical distribution

Write us what you intend to build. We have plans for many types of farm buildings—*free*. Ask for them.



Barn and Silos on farm of Gen. and Jos. D. F. Jankin, Easton, Md.

F-2

Say Where You Saw It When You Write.

The faculty of the home economics department were joint hostesses with Frigga Fylgae, an association of the undergraduate women in the College of Agriculture, at an informal party given in the home economics building Saturday evening, October 4. Stunts were presented by the Senior, Junior and Sophomore classes and informal speeches were given by Mary Moore '20, president of Frigga Fylgae, Professor Van Rensselaer and Dean A. R. Mann.

On a list just sent to Washington of the workers in subjects pertaining to agriculture and home economics at the New York State College of Agriculture at Cornell University there are two hundred and nineteen names. This list is intended for the annual bulletin published by the States Relations Service of the United States Department of Agriculture.

The number includes only those who are engaged in teaching, research, or demonstration, and does not include

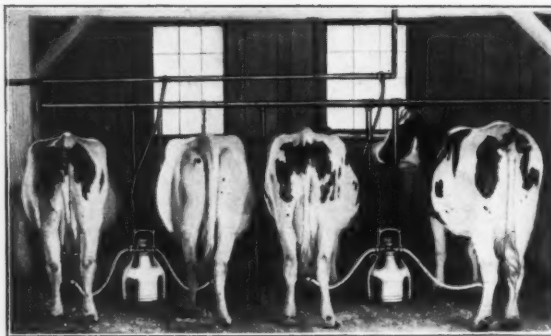
county farm bureau agents, district agents, or student assistants, or persons in merely executive positions, or employees in routine work.

Of the institutions which are included in the publication issued from Washington, Iowa State College at Ames probably has the largest number of workers, followed closely by New York, Minnesota, and Kansas.

Thomas Bregger, formerly an assistant in the department of plant breeding, has received the Distinguished Service Cross and the Croix de Guerre for extraordinary heroism in action.

E. W. Lindstrom, formerly an assistant in the department of plant breeding, is now assistant professor of genetics at the University of Wisconsin.

E. L. Overholzer, who went last year to the University of California in exchange with A. H. Hendrickson, has resigned his position as assistant professor in the department of pomology. He will stay in California. Mr.



BURRELL

MILKERS

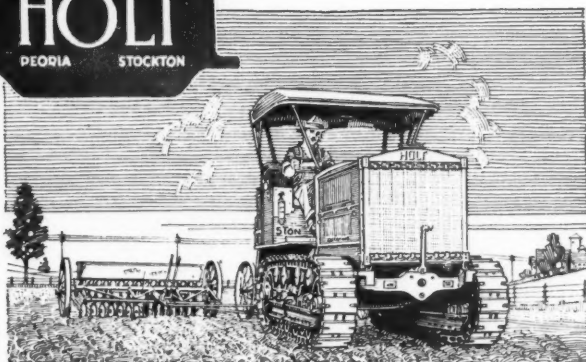
**DISTINCTIVE
EFFICIENT**

STURDY

D. H. BURRELL & CO., Inc.

Little Falls, N. Y.

Tell Advertisers Who Introduced You.



The 5-Ton and 10-Ton "CATERPILLAR" Tractors were officially adopted, and designated in 1917 as "5-Ton and 10-Ton Artillery Tractors" by the Ordnance Department, U. S. Army.



"CATERPILLAR" TRACTORS

REG. U.S. PAT. OFF.

Every farmer knows that the better the seed bed is prepared, the nearer the right time the crop is planted, the bigger will be the crop yield. But many farmers do not yet know that the "Caterpillar" is the one tractor that puts such work always within their power.

In the great world war the "Caterpillar" demonstrated its dependable power and endurance. On the farm you can drive it day and night if you wish—you can plow any field as deep as you want to, whenever you are ready and faster than you ever plowed before.

These "Caterpillar" Tractors are the models used by the U. S. and Allied governments. Their great strength, power and stamina, built for war's emergency, are ready now to work for you.

The 5-Ton model develops 3,100 pounds draw bar pull at a plowing speed of 3

miles per hour and easily draws four 14 inch plows at a plowing depth of 8 to 10 inches. Carries and lays its own track. Turns in its own length. Three speeds and reverse. Travels faster than 5 miles per hour on the road. Mud, soft soil or sand can not stop it. That's the kind of tractor every good farmer wants.

Get complete information about the "Caterpillar." Write Today -

The HOLT Manufacturing Co., Inc.
There is but one "CATERPILLAR"—HOLT builds it.

Peoria, Illinois.

Factories: Peoria, Ill. and Stockton, Cal.

Branches and Distributors:

Atlanta, Ga.
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 Spokane, Wash.

Wichita, Kans.
 Calgary, Alberta
 London, E. C.

Tell Advertisers Who Introduced You

Hendrickson, who has been giving work in the department, left for California October 15, after completing his work here in pomology for a Master's degree.

K. J. Seulke, professor of animal husbandry, has been elected president of the Intercollege Athletic Association.

E. W. Jenkins, '18, and T. O. Sprague, of the University of California have been appointed assistants in the department of pomology for the current year.

Book Reviews

(Continued from page 78)

History of Phytopathology. By H. H. Whetzel, Professor of Plant Pathology at Cornell University. Illustrated. 130 pages. Cloth, \$1.50 net. W. B. Saunders Company, Philadelphia and London.

An accurate but concise outline of the history of plant pathology. As the foremost investigator of plant pathology in America, Professor Whetzel is eminently

fitted to undertake such a work. Doubtless the present work is more timely than would be a more thoro and extended treatise. The book is divided into several chapters, each dealing with a definite period in the evolution of the science.

Plant Genetics. By John M. Coulter and Merle C. Coulter. Illustrated. 205 pages. Cloth, \$1.50, postage extra. University of Chicago Press, Chicago, Illinois.

A non-technical discussion of the history, significant experiments, and various theories of Genetics. The work is peculiar in that no new theory is propounded but rather a sensible conclusion drawn from existing theories of the various phenomena of sex-determination, inheritance and hybridization. Such a book must make for understanding and appreciation of the science,—for all lovers of the truth tend to trust and sympathize with the teacher who is big enough to be not ashamed to say, "I do not know."

We have planned a ration for dairy cows that meets the most exacting demands of practical dairymen and we print on the tag—facts and figures, that should answer every question.

"READ THE TAG DAIRY FEED"

In considering this Feed, keep these figures in mind: Total Digestible Protein 17.90% Total Carbohydrates 56.75%; and Total Digestible Nutrients 74%.

THE H-O COMPANY
Feed Department, BUFFALO, N. Y.

THE H-O COMPANY
48 State Street, ALBANY, N. Y.

Members U. S. Food Administration—License No. G. 12996
United States Wheat Director License No. 001158 E M

John J. Campbell, Eastern Sales Agt., Hartford, Conn.



Apollo

Roofing Products

Highest quality—Sold by weight

Why build to burn? Use Galvanized Roofing for farm buildings—Tin Roofs for residences.

APOLLO-KEYSTONE Galvanized Sheets not only excel for Roofing and Siding purposes, but are specially adapted for Culverts, Tanks, Spouting, and all exposed sheet metal work. KEYSTONE COPPER STEEL Roofing Tin Plates are unequalled. Sold by leading dealers. Look for the Keystone added below regular brands. Shall we send our "Better Buildings" booklet?

AMERICAN SHEET AND TIN PLATE COMPANY, Frick Bldg., Pittsburgh, Pa.

Say Where You Saw It When You Write.

EVERY man who tries Avalon Farms HOG-TONE may have his money back by telling his dealer or us that he's not satisfied with results.

Yet, since the beginning of HOG-TONE sales, a little over three years ago, approximately 10,000,000 hogs have been treated with this conditioner, tonic and vermifuge.

Avalon Farms HOG-TONE is not a universal "cure-all" or panacea. The direction sheet states as definitely the things HOG-TONE will not do as the things it will do.

For its intended purposes, Avalon Farms HOG-TONE has shown such remarkable results in so many thousand instances that it's worth while to try it.

Easy to use—very low in price—and it costs you nothing unless you're satisfied that your hogs show big returns in freedom from disease and more fat from the same feed.

AVALON FARMS CO., 339 West Ohio St., Chicago

**Try HOG-TONE
on your home farm.
Send no money. Pay
only if satisfied.**

I DON'T WANT YOU TO SEND A CENT WITH THIS COUPON

**W. O. Gandy, President
AVALON FARMS CO., 339 W. Ohio St., Chicago, Ill.**

I have.....hogs. Ship me immediately enough Avalon Farms HOG-TONE to treat them for 60 days. I am to pay nothing now except transportation charges. I agree to report results to you at end of 60 days and pay for the HOG-TONE at that time if it has done all that you claim. If it does not, I will return the labels to you and you agree to cancel the charge.

Name.....
Please Print Name

P. O.

R. R. No.....State.....

Shipping Point.....

Name and Address of My Druggist.....

Selling Agriculture to Fertilizer Salesmen

(Continued from page 72)

honest and energetic and intelligent as they themselves.

"Farmers' Week" and extension schools brought the farmer close to the college with mutual benefit to both. Now Cornell has taken the lead to bring in commercial industries which do business with farmers. The educational advantages from such meetings will be immense.

Salesmen must pass out information. It is in the nature of their business to do so. The colleges should see to it that they have access to the information which ought to be passed out. They are missing a wire direct to the farm if they fail to use the line.

More than all there is the value gained by coöperation. Men cannot meet together without discussing the problems which confront them daily, and

they cannot discuss problems which are mutual without giving and taking in points of view. And when men or groups of men progress to that point it is not long before they iron out minor misunderstandings and begin to drive at their common point from exactly the same angle—toward the accomplishment of a bigger and better agriculture.

Ethereal and Utopian? Yes, it does sound so. But every fertilizer man who attended the conference at Cornell, and I venture to guess the soils and chemistry men of the New York State College as well, feel just that way about their first "Fertilizer Short Course." They feel that failure to carry on and expand this work would be failure to avail themselves of the biggest opportunity for progressive educational coöperation that has appeared in many a day.

DAIRYMEN

Ensilage

Seed Corn

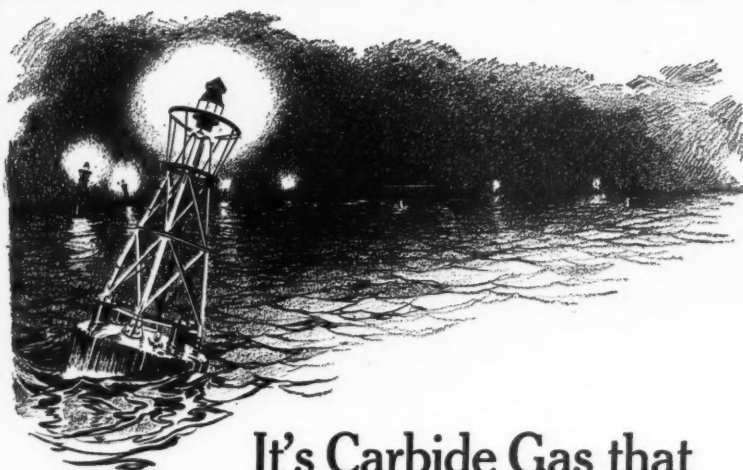
Good corn in your silo means dollars in your pocket. West Branch Sweepstakes and West Branch White Cap have given the best of satisfaction. Now is the time to plan for next year's seed. Write us at once.

**West Branch Seed Corn Growers'
Association**

Williamsport

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It's Carbide Gas that Lights the Panama Canal

PRECIOUS millions of shipping pass through the Panama Canal. Every possible safeguard protects it. And the light that makes passage risk-free is Carbide Gas—simple, dependable, brilliant.

These same wonderful qualities have made Carbide Gas the lighting standard for over a quarter of a million country homes. They make their own gas from Union Carbide and water—use it to light their houses and barns, to cook their meals.

The story of Union Carbide reads like magic—the white magic of the brightest and softest light known.

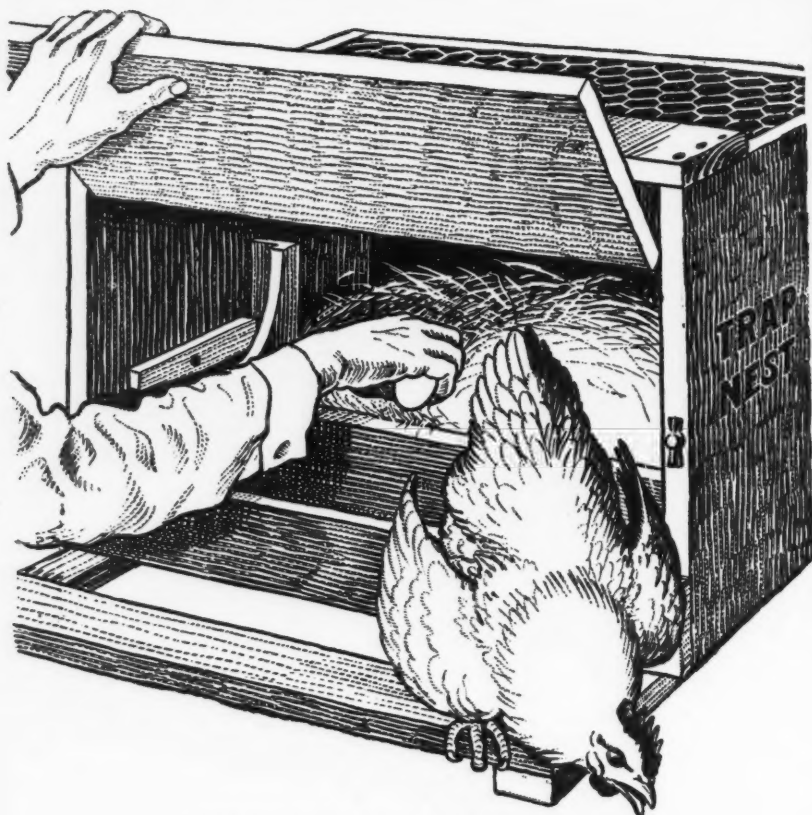
We will gladly send you an interesting new booklet if you will say the word.

UNION CARBIDE SALES COMPANY

30 East 42nd Street, New York

Peoples Gas Building, Chicago

Kohl Building, San Francisco



MORE EGGS OR MONEY BACK

The money paid for Purina Chicken Chowder will be refunded if hens, when fed Purina Chicken Chowder with Purina Scratch Feed as directed, do not lay more eggs than when fed other rations. This unusual guarantee is based upon the demonstrated egg-producing qualities of this correctly balanced ration. The reason why this broad guarantee is possible is that

PURINA CHICKEN CHOWDER AND PURINA SCRATCH FEED

when fed as directed, supply a perfect balance of yolk and white elements above the requirements for body maintenance. Based on the statements of one of the most prominent State Experiment Stations, it is shown that:

	Yolks	Whites
50 lbs. of Purina Scratch Feed are capable of producing	123.75	71.06
50 lbs. of Purina Chicken Chowder are capable of producing	91.02	141.27
A 100-lb. ration (50 lbs. of each) is capable of producing	214.77	212.33

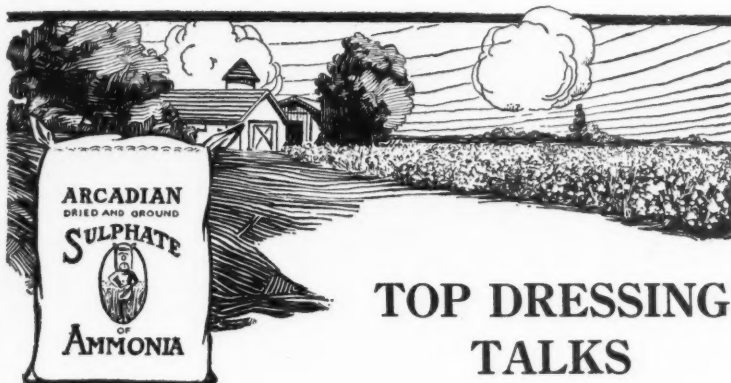
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Write us if he does not sell the
Purina "Checkerboard" line

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Buffalo, N. Y.
Sold in Checkerboard
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EVERY man who lives by Agriculture knows the importance of nitrogen as a plant food.

The most important source of nitrogen for fertilization in this country is Sulphate of Ammonia. It is a home product—American made—and is one of our greatest natural resources. Specially prepared under the name of

Arcadian Sulphate of Ammonia

It is also the best nitrogen carrier for use by itself.

ARCADIAN spreads easily and evenly by hand or machine, does not cake, and can be relied on to do its work promptly, steadily and satisfactorily.

The Great American Ammoniate

ARCADIAN Sulphate of Ammonia is the well-known standard article that has done you good service in your mixed fertilizers for years past. Especially kiln-dried and ground to make it fine and dry. Ammonia 25¼ % guaranteed. Made in U. S. A. If you would like to become better acquainted with ARCADIAN Sulphate of Ammonia, write for our booklets.

The *Barnett* Company

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Tell Advertisers Who Introduced You.

DAIRYMEN'S BULLETIN BOARD

FEED ENOUGH

Two Words That Spell PROFIT For Dairymen

Do you know that 90% of the dairy cows of America are underfed?
Do you know that nine out of every ten dairy cows would be BETTER producers if they were fed the proper ration to the limit of their capacity? Try this experiment and see for yourself the increased milk production you will get—begin feeding

SCHUMACHER FEED AND BIG "Q" DAIRY RATION




to your milking herd, two parts Schumacher and one part Big "Q," in the same amount you usually feed, together with ensilage or other roughage. After three or four days, begin increasing the amount 1 pound per cow at each feeding and keep increasing as long as each cow increases her milk production, until she has reached her maximum flow. Some of your cows will handle more feed than others. Watch the results on each individual cow and feed each cow to the limit—the increased milk production will repay you many times the cost of the additional feed. Mr. Fred Lehman, of Carlisle, Pa., proved that maximum feeding increased his profits \$85.30 during April from 4 cows.

SCHUMACHER FEED and BIG "Q" Dairy Ration fed in combination will solve your feeding problem, and if fed as directed will insure maximum production and profits.

These feeds make feeding easy, economical and accurate. SCHUMACHER FEED (the carbohydrate ration) and BIG "Q" (the high quality protein ration) have unusual palatability, high digestibility and nutrition. Thirty-five World's Champion Dairy Cows have made their World's Records with these feeds—undeniable proof that they are the greatest dairy feeds in the world. Your dealer can supply you.

Write for FREE Folder, "Long Time Milk Production and How to Get It"—also tells how to feed dairy cows during entire lactation periods for best results.

The Quaker Oats Company
Address: CHICAGO, U. S. A.

Say Where You Saw It When You Write.

